

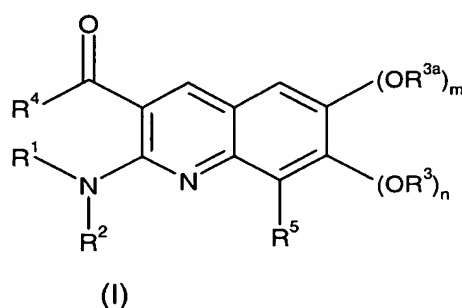
**Amendments To The Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**In the Claims:**

What is claimed is:

Claim 1(Original): A compound of Formula (I):



wherein:

$R^1$  is -H or  $C_1$ - $C_6$  alkyl;

$R^2$  is the group defined by  $-(Q)_q-(Q^1)_r-(Q^2)$ ,

wherein:

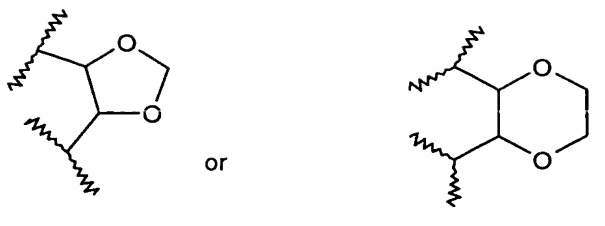
$Q$  is  $CH_2$  and  $q$  is 0, 1, 2, 3, or 4;

$Q^1$  is O, NH, or  $C(H)(R')$  where  $R'$  is -OH; and  $r$  is 0 or 1, and

$Q^2$  is -H,  $C_1$ - $C_6$  alkyl, aryl, heterocyclic,  $C_3$ - $C_7$  cycloalkyl,  $-C(O)OR^b$ ,  $NR^bR^b$ , or heteroaryl; where  $Q^2$  is optionally substituted with at least one  $R^a$  group;

$R^3$  and  $R^{3a}$  are independently selected from -H,  $C_1$ - $C_6$  alkyl, or  $C_1$ - $C_6$  hydroxyalkyl,  $m$  is 0 or 1, and  $n$  is 0 or 1, or

$m$  is 1 and  $n$  is 1 and  $R^3$  and  $R^{3a}$  together with the atoms to which they are attached form the optionally substituted fused ring



$R^4$  is  $-\text{OH}$ ,  $-\text{NHS}(\text{O})_2R^c$ , or  $-\text{N}(R^b)R$ ;

$R^5$  is  $-\text{H}$  or halo;

$R$  is  $-\text{H}$ , aryl,  $-\text{OR}^b$ ;

$R^a$  is independently selected from  $\text{C}_1\text{-C}_6$  alkyl, halo, aryl,  $-\text{C}(\text{O})\text{OR}^b$ ,  $-\text{C}(\text{O})R^d$ ,  $-\text{OH}$ ,  $-\text{NR}^bR^b$ ,  $-\text{N}(\text{H})\text{C}(\text{O})\text{OR}^b$ ,  $-\text{N}(\text{H})\text{C}(\text{O})\text{N}(\text{H})R^e$ ,  $-\text{N}(\text{H})\text{S}(\text{O})_2R^c$ ,  $-\text{N}(\text{H})\text{S}(\text{O})_2\text{NR}^bR^b$ ,  $\text{C}_1\text{-C}_6$  alkoxy,  $\text{C}_1\text{-C}_6$  haloalkyl,  $-\text{NO}_2$ ,  $-\text{CN}$ ,  $-\text{SF}_5$ ,  $=\text{O}$ ,  $-\text{S}(\text{O})_2\text{NR}^bR^b$ , or aryloxy;

$R^b$  is  $-\text{H}$ ,  $\text{C}_1\text{-C}_6$  alkyl, or  $\text{C}_2\text{-C}_4$  alkenyl;

$R^c$  is aryl or  $\text{C}_1\text{-C}_6$  alkyl;

$R^d$  is  $\text{C}_1\text{-C}_6$  alkyl, aryl,  $\text{NR}^bR^b$ , or  $\text{N}(\text{H})(\text{CH}_2)_s\text{NR}^bR^b$ ,

$R^e$  is  $-\text{H}$ , aryl or  $\text{C}_1\text{-C}_6$  alkyl;

$s$  is 1, 2, 3, or 4;

or a pharmaceutically acceptable salt or solvate thereof.

Claim 2 (Original): A compound as claimed in claim 1, selected from the group consisting of:

2-(3-tert-butoxycarbonylamino-propylamino)-7-methoxy-quinoline-3-carboxylic acid;

2-(3-amino-propylamino)-7-methoxy-quinoline-3-carboxylic acid;

2-[2-(4-tert-butoxycarbonyl-piperazin-1-yl)-ethylamino]-7-methoxy-quinoline-3-carboxylic acid;

2-(4-tert-butoxycarbonylamino-butyl amino)-7-methoxy-quinoline-3-carboxylic acid;

2-(2-tert-butoxycarbonylamino-ethyl

amino)-7-methoxy-quinoline-3-carboxylic acid;  
2-(3-dimethylamino-propylamino)-7-methoxy-quinoline-3-carboxylic acid;  
2-(2-dimethylamino-ethylamino)-7-methoxy-quinoline-3-carboxylic acid;  
2-(2-amino-ethylamino)-7-methoxy-quinoline-3-carboxylic acid;  
2-(4-amino-butylamino)-7-methoxy-quinoline-3-carboxylic acid;  
2-benzylamino-7-methoxy-quinoline-3-carboxylic acid;  
7-methoxy-2-phenethylamino-quinoline-3-carboxylic acid;  
7-methoxy-2-(2-pyridin-4-yl-ethylamino)-quinoline-3-carboxylic acid;  
2-(2-dimethylamino-ethylamino)-7-methoxy-quinoline-3-carboxylic acid;  
2-(indan-2-ylamino)-7-methoxy-quinoline-3-carboxylic acid;  
7-methoxy-2-(3-morpholin-4-yl-propylamino)-quinoline-3-carboxylic acid;  
2-(3-diethylamino-propylamino)-7-methoxy-quinoline-3-carboxylic acid;  
7-methoxy-2-[3-(2-oxo-pyrrolidin-1-yl)-propylamino]-quinoline-3-carboxylic acid;  
2-(4-tert-butyl-benzylamino)-7-methoxy-quinoline-3-carboxylic acid;  
7-methoxy-2-[2-(2-oxo-imidazolidin-1-yl)-ethylamino]-quinoline-3-carboxylic acid;  
2-(4-dimethylamino-benzylamino)-7-methoxy-quinoline-3-carboxylic acid;  
7-methoxy-2-(2-morpholin-4-yl-ethylamino)-quinoline-3-carboxylic acid;  
7-methoxy-2-[2-(4-phenoxy-phenyl)-ethylamino]-quinoline-3-carboxylic acid;  
2-cyclohexylamino-7-methoxy-quinoline-3-carboxylic acid;  
7-methoxy-2-[(tetrahydro-furan-2-ylmethyl)-amino]-quinoline-3-carboxylic acid;  
2-(2-hydroxy-ethylamino)-7-methoxy-quinoline-3-carboxylic acid;  
2-(2-hydroxy-2-phenyl-ethylamino)-7-methoxy-quinoline-3-carboxylic acid;  
2-[2-(3-bromo-4-methoxy-phenyl)-ethylamino]-7-methoxy-quinoline-3-carboxylic acid;  
7-methoxy-2-(4-methyl-benzylamino)-quinoline-3-carboxylic acid;  
7-methoxy-2-(2-pyridin-3-yl-ethylamino)-quinoline-3-carboxylic acid;  
2-[2-(3,4-dimethoxy-phenyl)-ethylamino]-7-methoxy-quinoline-3-carboxylic acid;  
2-benzylamino-7-methoxy-quinoline-3-carboxylic acid;  
7-methoxy-2-(3-morpholin-4-yl-propylamino)-quinoline-3-carboxylic acid; and  
7-methoxy-2-piperidin-1-yl-quinoline-3-carboxylic acid;

7-methoxy-2-(3-pentafluorosulfanyl-phenylamino)-quinoline-3-carboxylic acid;  
7-methoxy-2-(5,6,7,8-tetrahydro-naphthalen-1-ylamino)-quinoline-3-carboxylic acid;  
7-methoxy-2-(naphthalen-1-ylamino)-quinoline-3-carboxylic acid;  
2-[4-(2-diethylamino-ethylcarbamoyl)-phenylamino]-7-methoxy-quinoline-3-carboxylic acid;  
2-(3-tert-butoxycarbonylamino-benzylamino)-7-methoxy-quinoline-3-carboxylic acid;  
2-(4-tert-butoxycarbonylamino-benzylamino)-7-methoxy-quinoline-3-carboxylic acid;  
2-(4-amino-benzylamino)-7-methoxy-quinoline-3-carboxylic acid;  
7-methoxy-2-(2,4,6-trimethoxy-benzylamino)-quinoline-3-carboxylic acid;  
7-methoxy-2-[3-(3-phenyl-ureido)-benzylamino]-quinoline-3-carboxylic acid;  
7-methoxy-2-[4-(3-phenyl-ureido)-benzylamino]-quinoline-3-carboxylic acid;  
7-methoxy-2-[4-(toluene-4-sulfonylamino)-benzylamino]-quinoline-3-carboxylic acid;  
7-methoxy-2-(3-ureido-benzylamino)-quinoline-3-carboxylic acid;  
2-(dimethylaminosulfonylamino-benzylamino)-7-methoxy-quinoline-3-carboxylic acid;  
7-methoxy-2-[2-(4-methoxy-phenyl)-ethylamino]-quinoline-3-carboxylic acid;  
7-methoxy-2-[2-(2-methoxy-phenyl)-ethylamino]-quinoline-3-carboxylic acid;  
7-methoxy-2-(4-methoxy-benzylamino)-quinoline-3-carboxylic acid;  
2-[(benzo[1,3]dioxol-5-ylmethyl)-amino]-7-methoxy-quinoline-3-carboxylic acid;  
7-methoxy-2-(3-trifluoromethyl-benzylamino)-quinoline-3-carboxylic acid;  
7-methoxy-2-[2-(4-nitro-phenyl)-ethylamino]-quinoline-3-carboxylic acid;  
2-(3-imidazol-1-yl-propylamino)-7-methoxy-quinoline-3-carboxylic acid;  
7-methoxy-2-(4-sulfamoyl-benzylamino)-quinoline-3-carboxylic acid;  
7-methoxy-2-(3-methoxy-benzylamino)-quinoline-3-carboxylic acid;  
2-(2-chloro-benzylamino)-7-methoxy-quinoline-3-carboxylic acid;  
2-[2-(3-fluoro-phenyl)-ethylamino]-7-methoxy-quinoline-3-carboxylic acid;  
2-[2-(4-amino-phenyl)-ethylamino]-7-methoxy-quinoline-3-carboxylic acid;  
2-(3-amino-benzylamino)-7-methoxy-quinoline-3-carboxylic acid;

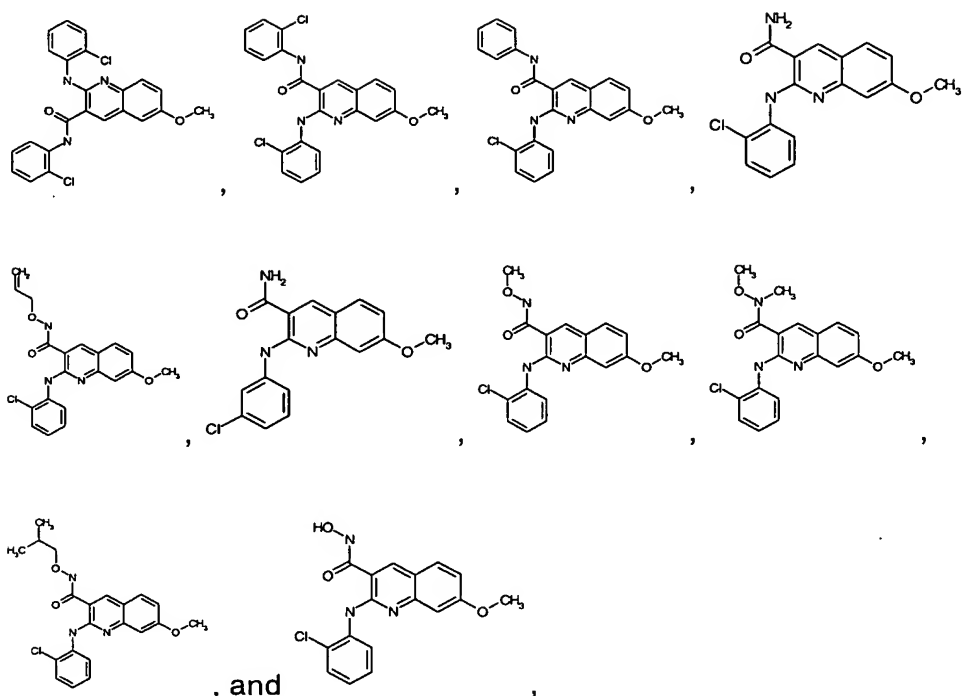
2-(2-benzo[1,3]dioxol-5-yl-ethylamino)-7-methoxy-quinoline-3-carboxylic acid;  
 7-methoxy-2-[2-(3-methoxy-phenyl)-ethylamino]-quinoline-3-carboxylic acid;  
 2-[2-(3-chloro-phenyl)-ethylamino]-7-methoxy-quinoline-3-carboxylic acid;  
 7-methoxy-2-[2-(4-sulfamoyl-phenyl)-ethylamino]-quinoline-3-carboxylic acid;  
 2-[2-(2-chloro-phenyl)-ethylamino]-7-methoxy-quinoline-3-carboxylic acid;  
 2-[2-(4-hydroxy-phenyl)-ethylamino]-7-methoxy-quinoline-3-carboxylic acid;  
 2-(3-bromo-benzylamino)-7-methoxy-quinoline-3-carboxylic acid;  
 2-(3-chloro-benzylamino)-7-methoxy-quinoline-3-carboxylic acid;  
 7-methoxy-2-(2-piperazin-1-yl-ethylamino)-quinoline-3-carboxylic acid;  
 7-methoxy-2-[2-(1-methyl-pyrrolidin-2-yl)-ethylamino]-quinoline-3-carboxylic acid;  
 7-methoxy-2-piperidin-1-yl-quinoline-3-carboxylic acid;  
 2-(4-chloro-benzylamino)-7-methoxy-quinoline-3-carboxylic acid;  
 2-(4-hydroxy-piperidin-1-yl)-7-methoxy-quinoline-3-carboxylic acid;  
 2-(tert-butoxycarbonylmethyl-amino)-7-methoxy-quinoline-3-carboxylic acid;  
 2-[2-(2-hydroxy-ethoxy)-ethylamino]-7-methoxy-quinoline-3-carboxylic acid;  
 7-methoxy-2-(3-methoxy-propylamino)-quinoline-3-carboxylic acid;  
 7-methoxy-2-(2-methoxy-ethylamino)-quinoline-3-carboxylic acid;  
 2-(3-hydroxy-propylamino)-7-methoxy-quinoline-3-carboxylic acid;  
 2-(2-carboxy-ethylamino)-7-methoxy-quinoline-3-carboxylic acid;  
 7-methoxy-2-propylamino-quinoline-3-carboxylic acid;  
 2-(carboxymethyl-amino)-7-methoxy-quinoline-3-carboxylic acid;  
 3-(2-chloro-phenylamino)-6-methoxy-naphthalene-2-carboxylic acid;  
 2-(2-chloro-phenylamino)-7-methoxy-quinoline-3-carboxylic acid phenylamide;  
 2-(2-chloro-phenylamino)-7-hydroxy-quinoline-3-carboxylic acid phenylamide;  
 2-(2-chloro-phenylamino)-7-hydroxy-quinoline-3-carboxylic acid;  
 2-(2-chloro-phenylamino)-7-(2-hydroxy-ethoxy)-quinoline-3-carboxylic acid;  
 2-(3,4-dichlorophenylamino)-7-methoxy-quinoline-3-carboxylic acid;  
 2-(3-biphenylamino)-7-methoxy-quinoline-3-carboxylic acid;  
 7-methoxy-2-(phenylamino)-quinoline-3-carboxylic acid;  
 7-methoxy-2-(methyl-3-methylphenylamino)-quinoline-3-carboxylic acid;

2-(cyclohexylamino)-7-methoxy-quinoline-3-carboxylic acid;  
2-(3-chlorophenylamino)-6,7-dimethoxy-quinoline-3-carboxylic acid;  
2-(3-chlorophenylamino)-6,7-methylenedioxy-quinoline-3-carboxylic acid;  
2-(3-chlorophenylamino)-7-hydroxy-quinoline-3-carboxylic acid;  
8-bromo-2-(3-chlorophenylamino)-7-hydroxy-quinoline-3-carboxylic acid;  
2-(3-chlorophenylamino)-7-methoxy-quinoline-3-carboxamide  
phenylsulphonamide;  
2-(3-chlorophenylamino)-7-methoxy-quinoline-3-carboxamide 2-nitro-  
phenylsulphonamide;  
2-(3-chlorophenylamino)-7-methoxy-quinoline-3-carboxamide  
methylsulphonamide;  
8-bromo-2-(3-chlorophenylamino)-7-methoxy-quinoline-3-carboxylic acid;  
2-(3-acetophenylamino)-7-methoxy-quinoline-3-carboxylic acid;  
2-(2-benzophenone-yl-amino)-7-methoxy-quinoline-3-carboxylic acid;  
2-(2-fluoro-5-methylphenylamino)-7-methoxy-quinoline-3-carboxylic acid;  
2-(2-cyanophenylamino)-7-methoxy-quinoline-3-carboxylic acid;  
2-(2-chloro-6-methylphenylamino)-7-methoxy-quinoline-3-carboxylic acid;  
2-(4-carboxybenzylamino)-7-methoxy-quinoline-3-carboxylic acid;  
2-(3-chloro-6-methoxyphenylamino)-7-methoxy-quinoline-3-carboxylic acid;  
2-(2-ethylphenylamino)-7-methoxy-quinoline-3-carboxylic acid;  
7-methoxy-2-(4-nitrophenylamino)-quinoline-3-carboxylic acid;  
2-(4-carboxamidophenylamino)-7-methoxy-quinoline-3-carboxylic acid;  
7-methoxy-2-(4-hydroxyphenethylamino)-quinoline-3-carboxylic acid; and  
7-methoxy-2-(piperidin-4-ol)-quinoline-3-carboxylic acid;

or a salt, solvate, or physiologically functional derivative thereof.

Claim 3 (Original):  
the group consisting of:

A compound as claimed in claim 1, selected from



or a salt, solvate, or physiologically functional derivative thereof.

**Claim 4 (Currently Amended):**

A pharmaceutical composition,

comprising: a therapeutically effective amount of a compound as claimed in ~~any one of claims~~ claim 1 to 3, or a salt, solvate, or a physiologically functional derivative thereof and one or more of pharmaceutically acceptable carriers, diluents and excipients.

**Claim 5 (Currently Amended):**

A method of treating a disorder in a

mammal, said disorder being mediated by inappropriate YAK3 activity, comprising: administering to said mammal a therapeutically effective amount of a compound as claimed in ~~any one of claims~~ claim 1 to 3, or a salt, solvate, or a physiologically functional derivative thereof.

Claim 6-7 (Cancelled):

Claim 8 (New): A compound as claimed in claim 1, wherein  $R^1$  is  $-H$  or methyl.

Claim 9 (New): A compound as claimed in claim 1, wherein  $R^1$  is  $-H$ .

Claim 10 (New): A compound as claimed in claim 1, wherein  $q$  and  $r$  are 0, and  $R^2$  is  $-(Q^2)$ .

Claim 11 (New): A compound as claimed in claim 1, wherein  $q$  is 1, 2, 3, or 4,  $r$  is 0 and  $R^2$  is  $-(Q)_q-(Q^2)$ .

Claim 12 (New): A compound as claimed in claim 1, wherein  $q$  is 0,  $r$  is 1, and  $R^2$  is  $-(Q^1)-(Q^2)$ .

Claim 13 (New): A compound as claimed in claim 1, wherein  $q$  is 1, 2, 3, or 4 and  $r$  are 1, and  $R^2$  is  $-(Q)_q-(Q^1)-(Q^2)$ .

Claim 14 (New): A compound as claimed in claim 1, wherein  $q$  is 1, 2, 3, or 4 and  $Q$  is  $CH_2$ .

Claim 15 (New): A compound as claimed in claim 1, wherein  $q$  is 1, 2, or 3 and  $Q$  is  $CH_2$ .

Claim 16 (New): A compound as claimed in claim 1, wherein  $q$  is 1 or 2 and  $Q$  is  $CH_2$ .

Claim 17 (New): A compound as claimed in claim 1, wherein  $r$  is 0 or 1 and  $Q^1$  is  $NH$  or  $O$ .

Claim 18 (New): A compound as claimed in claim 1, wherein  $r$  is 0 or 1 and  $Q^1$  is  $NH$ .



Claim 19 (New) A compound as claimed in claim 1, wherein  $r$  is 0.

Claim 20 (New): A compound as claimed in claim 1, wherein  $Q^2$  is  $C_1$ - $C_6$  alkyl, aryl, heterocyclic,  $C_3$ - $C_7$ cycloalkyl, or heteroaryl each optionally substituted with at least one  $R^a$  group.

Claim 21 (New): A compound as claimed in claim 1, wherein  $Q^2$  is aryl optionally substituted with at least one  $R^a$  group.

Claim 22 (New): A compound as claimed in claim 1, wherein  $Q$  is  $CH^2$ ,  $q$  is 1, 2, 3, or 4,  $r$  is 0, and  $Q^2$  is aryl optionally substituted with at least one  $R^a$  group.

Claim 23 (New): A compound as claimed in claim 1, wherein  $Q$  is  $CH^2$ ,  $q$  is 1, 2, or 3,  $r$  is 0, and  $Q^2$  is phenyl optionally substituted with at least one  $R^a$  group.

Claim 24 (New): A compound as claimed in claim 1, wherein  $Q$  is  $CH^2$ ,  $q$  is 2,  $r$  is 0, and  $Q^2$  is phenyl optionally substituted with at least one  $R^a$  group.

Claim 25 (New) A compound as claimed in claim 1, wherein  $q$  is 0,  $r$  is 0, and  $Q^2$  is aryl optionally substituted with at least one  $R^a$  group.

Claim 26 (New): A compound as claimed in claim 1, wherein  $q$  is 0,  $r$  is 0, and  $Q^2$  is phenyl optionally substituted with at least one  $R^a$  group.

Claim 27 (New) A compound as claimed in claim 1, wherein  $q$  is 0,  $r$  is 0, and  $Q^2$  is  $C_1$ - $C_6$  alkyl optionally substituted with at least one  $R^a$  group.

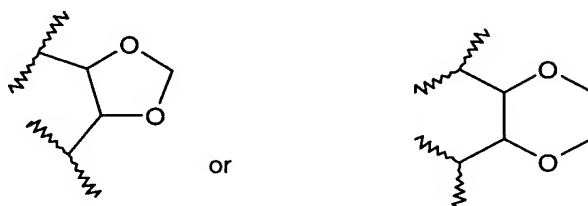
Claim 28 (New): A compound as claimed in claim 1, wherein  $m$  is 0,  $n$  is 1, and  $R^3$  is  $-H$  or  $C_1$ - $C_6$  alkyl.

Claim 29 (New): A compound as claimed in claim 1, wherein  $m$  is 0,  $n$  is 1, and  $R^3$  is  $-H$  or methyl.

Claim 30 (New): A compound as claimed in claim 1, wherein m is 1, n is 0, and  $R^{3a}$  is -H or  $C_1$ - $C_6$  alkyl.

Claim 31 (New) A compound as claimed in claim 1, wherein m is 1, n is 0, and  $R^{3a}$  is -H or methyl.

Claim 32 (New): A compound as claimed in claim 1, wherein m is 1 and n is 1 and  $R^3$  and  $R^{3a}$  together with the atoms to which they are attached form the optionally substituted fused ring



Claim 33 (New): A compound as claimed in claim 1, wherein  $R^4$  is -NHS(O) $_2R^c$ , wherein  $R^c$  is aryl or  $C_1$ - $C_6$  alkyl.

Claim 34 (New): A compound as claimed in claim 1, wherein  $R^c$  is phenyl, substituted phenyl or methyl.

Claim 35 (New): A compound as claimed in claim 1, wherein  $R^4$  is -OH.

Claim 36 (New): A compound as claimed in claim 1, wherein  $R^4$  is -N( $R^b$ )R wherein R is -H, aryl or -OR<sup>b</sup> and  $R^b$  is -H,  $C_1$ - $C_6$  alkyl, or  $C_1$ - $C_6$  alkenyl.

Claim 37 (New): A compound as claimed in claim 1, wherein  $R^5$  is halo.

Claim 38 (New): A compound as claimed in claim 1, wherein  $R^5$  is -Br.

Claim 39 (New): A compound as claimed in claim 1, wherein  $R^5$  is -H.